CLAIMS

1   1.   On computer readable media, a computer program set for
2   running in a J2EE environment including an application server and
3   message-driven beans, said program set comprising:
4   software agents, each of which incorporates a respective
5   message-driven bean;
6   configuration data external to said software agents for
7   determining dependencies among said software agents so that an
8   output of a first of said software agents can serve as an input to a
9   second of said software agents; and
10   an agent server for implementing said agents and said
11   dependencies, said agent server being coupled to said application
12   server, said software agents, and said configuration data.

1   2.   A computer program set as recited in Claim 1 wherein said
2   software agents include an invoker agent for receiving task requests
3   from a client external to said agent server.

1   3.   A computer program set as recited in Claim 2 wherein said
2   invoker agent selects said second agent for executing a task
3   specified in said task request.

1   4.   A computer program set as recited in Claim 3 wherein said
2   invoker selects said second agent as a function of said configuration
3   data.

1   5.   A computer program set as recited in Claim 3 wherein said

2   invoker agent determines said second agent has a prerequisite for

3   executing said task, said invoker agent determining whether or not

4   said prerequisite is met by said request and

5   if said prerequisite is met, invoking said second agent, and

6   if said prerequisite is not met, invoking said first agent of said

7   agents, said third agent being invoked to meet said prerequisite.

1   6.   A computer program set as recited in Claim 5 wherein said

2   invoker agent selects said first agent as a function of said

3   configuration data.

1   7.   A computer program set as recited in Claim 5 wherein said

2   first agent invokes said second agent once said prerequisite is met.

1   8.   A computer program set as recited in Claim 2 further

2   comprising a database, said invoker agent storing said request in

3   said database.

1   9.   A computer program set as recited in Claim 8 wherein each of

2   said agents stores its status in said database.

1   10. A computer program set as recited in Claim 1 wherein said

2   agent server provides for configurable error handling, said

3   configuration data specifying configurations for said error handling.

1   11. A computer-implemented method comprising:

2   a first software agent incorporating a first message-driven bean

3   receiving a first message requesting a second software agent

4   incorporating a second message-driven bean to achieve a goal;

5   said first software agent examining configuration data external

6   to said first and second software agents to determine if said second

7   software agent has any prerequisites that are not met by said first

8   message;

9   if not, said first software agent invoking said second software

10   agent by sending a second message to said second software agent;

11   and

12   if yes, said first software agent examining configuration data

13   external to said first and second software agents to identify a third

14   software agent incorporating a third message-driven bean that

15   meets a prerequisite of said second software agent that is not met

16   by said request and then invokes said third software agent by

17   sending a third message to it.

1   12. A method as recited in Claim 11 wherein, if, when it is

2   determined that said second software agent has prerequisites that

3   are not met by first message, if said prerequisites are also not met

4   by said third software agent, said third software agent invoking a

5   fourth software agent incorporating a fourth message-driven bean

6   agent that meets another prerequisite of said second software

7   agent.

1   13.   A method as recited in Claim 11 wherein, if, when it is
2   determined that said second software agent has prerequisites that
3   are not met by first message, if said prerequisites are also not met
4   by said third software agent, said first software agent also invoking
5   a fourth software agent incorporating a fourth message-driven bean
6   agent that meets another prerequisite of said second software
7   agent, said fourth software agent being invoked in parallel with said
8   third software agent.